

AD-A085 527

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/8 4/2
12823A LANCE MISSILE NUMBER 3717; ROUND NUMBER 343 ECL. 11 APR1--ETC(11)
APR 80

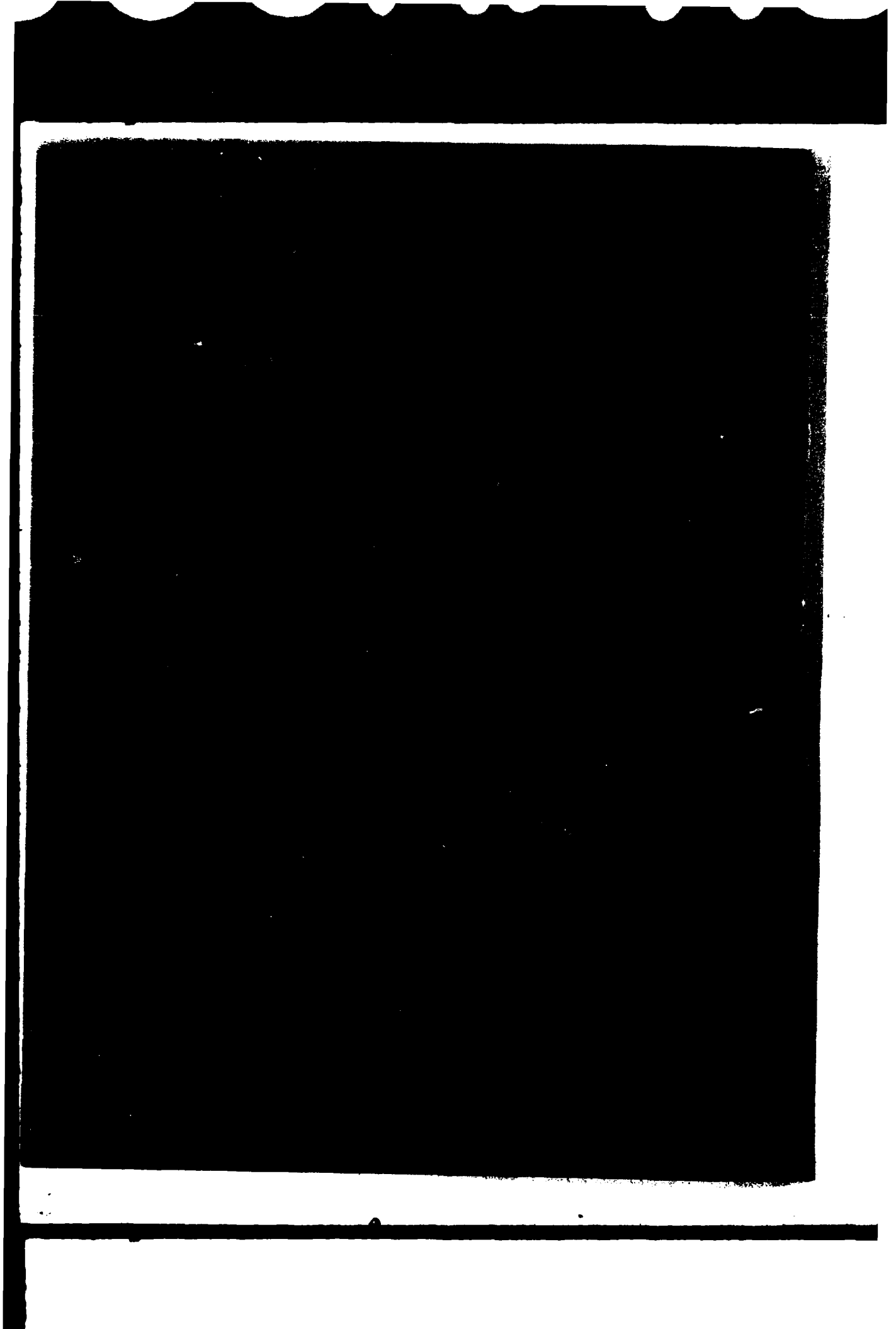
UNCLASSIFIED ERADCOM/ASL-DR-1143

NL

1 OF 17
AD
A085527

END
DATE
FILMED
7-80
DTIC

ADA 085527



REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DA 1143	2. GOVT ACCESSION NO. AD-A085527	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 12823A LANCE Missile Number 3717 Round Number 343 ECL		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s)		6. PERFORMING ORG. REPORT NUMBER
White Sands Meteorological Team		8. CONTRACT OR GRANT NUMBER(s) DA TASK 1F665702D127-02
9. PERFORMING ORGANIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, NM 88002		12. REPORT DATE April 1980
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research & Development Cmd Adelphi, MD 20783		13. NUMBER OF PAGES 32
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
16. DISTRIBUTION STATEMENT (of this Report)		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 12823A LANCE, Missile Number 3717, Round Number 343 ECL are presented in tabular form.		

CONTENTS

	PAGE
INTRODUCTION-----	1
DISCUSSION-----	1

TABLES

1. Surface Observation taken at 0855 MST at Don Site-----	2
2. Don Site Pilot Balloon Measured Wind Data at 0845 MST----	3
3. Don Site Pilot Balloon Measured Wind Data at 0855 MST----	4
4. WSD Significant Level Data at 0820 MST-----	5
5. WSD Upper Air Data at 0820 MST-----	7
6. WSD Mandatory Levels at 0820 MST-----	12
7. HMN Significant Level Data at 0730 MST-----	13
8. HMN Upper Air Data at 0730 MST-----	15
9. HMN Mandatory Levels at 0730 MST-----	20
10. JAL Significant Level Data at 0845 MST-----	21
11. JAL Upper Air Data at 0845 MST-----	23
12. JAL Mandatory Levels at 0845 MST-----	28

Accession For	
WTIS GRAAI	<input checked="" type="checkbox"/>
DDC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/ _____	
Availability Code _____	
Dist	Avail and/or special
A	

INTRODUCTION

12823A LANCE, Missile Number 3717, Round 343 ECL,
was launched from DON SITE, White Sands Missile Range (WSMR), New Mexico,
at 0855 MST on 11 April 1980. The scheduled launch time was
0830 MST.

DESCRIPTION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the DON Met Site at T-0.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from WAPN I-5 profile observation at:

SITE AND ALTITUDE

DON 2100 meters and 2880 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to high as possible feet in 500-foot increments.

SITE AND TIME

WSD 0820 MST

HMN 0730 MST

JAL 0845 MST

TABLE 1. Surface Observations taken at 0855 MST,
11 April 1980, at Don Site, 12823A LANCE,
Missile Number 3717, Round Number 343 ECL.

ELEVATION	3996.83	FT/MSL
PRESSURE	872.7	MBS
TEMPERATURE	22.8	°C
RELATIVE HUMIDITY	20	
DEW POINT	-1.4	°C
DENSITY	1024	GM/M ³
WIND SPEED	CALM	KTS
WIND DIRECTION		DEGREES
CLOUD COVER	CLEAR	

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM DON SITE DATE 11 April 1980 TIME 0855 MST

RELEASED POINT COORDINATES (WSTM) 511,988.37 247,396.36 3996.83

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHTS ARE METERS AGL XXX OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC		CALM	1860	261	23			
60	152	04	1920	263	23			
120	172	10	1980	266	26			
180	159	11	2040	267	28			
240	168	12	2100	263	29			
300	177	11	2160	269	31			
360	176	11	2220	265	30			
420	185	12	2280	265	30			
480	199	13	2340	263	29			
540	208	14	2400	262	28			
600	213	12	2460	266	29			
660	214	13	2520	266	28			
720	225	12	2580	265	28			
780	227	11	2640	265	29			
840	237	10	2700	265	29			
900	236	09	2760	265	29			
960	242	09	2820	259	30			
1020	236	11	2880	264	29			
1080	246	10						
1140	244	10						
1200	249	10						
1260	243	11						
1320	256	14						
1380	256	17						
1440	256	16						
1500	257	16						
1560	261	17						
1620	262	18						
1680	264	18						
1740	263	20						
1800	265	22						

STATION ALTITUDE 3989.00 FEET MSL
11 APR. 60
ASCENSION NO. 192

SIGNIFICANT LEVEL DATA
1020020192
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 4

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
872.8 3989.0	-1.0	22.0
863.8 4282.3	2.4	32.0
850.0 4735.9	1.5	33.0
791.8 6711.2	-2.0	35.0
700.0 10060.9	-8.6	38.0
629.4 12864.5	-12.7	49.0
617.5 13359.8	-16.7	37.0
585.0 14756.5	-23.2	24.0
550.8 16298.3	-25.9	24.0
525.6 17485.9	-24.6	31.0
500.0 18739.7	-27.1	33.0
446.4 21525.1	-33.9	33.0
416.8 23174.6	-36.8	33.0
400.0 24151.5	-38.1	38.0
381.2 25281.4	-41.1	36.0
360.8 26555.8	-41.9	47.0
347.4 27424.0	-44.7	39.0
328.2 28718.7	-47.5	36.0
315.2 29630.5	-49.8	35.0
300.0 30734.7	-42.6	
284.8 31885.7	-44.6	
250.0 34715.4	-51.5	
239.8 35604.1	-52.5	
224.4 37007.5	-55.5	
200.0 39419.1	-56.6	
188.4 40667.4	-56.8	
186.2 40913.4	-55.5	
182.0 41393.4	-54.9	
174.5 42284.8	-52.5	
150.0 45466.3	-58.2	
148.2 45716.6	-58.7	
144.4 46257.5	-56.4	
129.2 48574.1	-58.6	
118.4 50386.8	-57.8	
108.2 52249.9	-60.4	
100.0 53865.7	-61.6	
92.0 55569.8	-61.8	
74.2 59922.9	-65.7	
71.4 60703.7	-60.8	
70.0 61111.2	-59.9	

STATION ALTITUDE 9000 FEET
11 APR. 61
ASCENSION 192

STATION DATA
102 102
WHITE SANDS

TABLE 4 (CONT)

PRESSURE GEOMETRIC		TEMPERATURE		REL. HUM.
MILLIBARS	ALTITUDE MSL FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT
65.8	62382.9	-61.4		
60.4	64157.6	-56.4		
52.4	67105.0	-61.1		
50.0	68069.8	-59.9		
42.0	71704.9	-55.6		
31.6	77690.5	-56.2		
30.0	78785.2	-54.7		
23.6	83917.7	-50.2		
20.8	86636.7	-51.9		
20.0	87478.2	-51.8		
14.6	94335.2	-45.2		
10.4	101853.1	-44.4		

STATION ALTITUDE 3989.00 FEET MSL
11 APR. 80 0820 HRS MST
ASCENSION NO. 192

UPPER AIR DATA
1020020192
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 5

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	872.8	20.9	22.0	1031.6	668.8	120.0	6.0	1.000254
4000.0	872.5	20.8	22.4	1031.3	668.8	120.1	6.0	1.000254
4500.0	857.1	18.8	32.5	1019.7	666.7	131.4	3.0	1.000259
5000.0	842.0	17.3	33.3	1006.7	665.0	215.7	1.2	1.000254
5500.0	827.0	16.1	33.8	993.2	663.5	271.1	3.0	1.000249
6000.0	812.3	14.9	34.3	979.8	662.0	279.5	6.0	1.000245
6500.0	797.8	13.6	34.8	966.7	660.6	280.2	9.4	1.000240
7000.0	783.4	12.3	35.3	953.6	659.1	280.5	12.1	1.000236
7500.0	769.2	11.1	35.7	940.6	657.5	279.5	14.6	1.000232
8000.0	755.1	9.8	36.2	927.8	656.0	278.4	17.1	1.000227
8500.0	741.4	8.5	36.6	915.2	654.4	279.1	19.1	1.000223
9000.0	727.9	7.2	37.0	902.8	652.9	281.0	21.0	1.000219
9500.0	714.6	5.9	37.5	890.6	651.3	282.3	22.7	1.000215
10000.0	701.6	4.6	37.9	878.5	649.8	281.0	23.0	1.000211
10500.0	688.4	3.1	39.7	866.6	648.1	280.9	24.5	1.000208
11000.0	675.5	1.7	41.7	854.7	646.4	278.5	25.5	1.000205
11500.0	662.8	.3	43.6	843.1	644.7	275.5	26.5	1.000202
12000.0	650.4	-1.1	45.6	831.7	643.0	273.4	27.7	1.000198
12500.0	638.2	-2.6	47.6	820.4	641.3	273.4	28.7	1.000195
13000.0	626.1	-3.8	45.7	808.7	639.8	273.7	30.0	1.000191
13500.0	614.2	-4.4	35.7	795.2	639.0	274.8	32.4	1.000185
14000.0	602.4	-5.0	31.0	781.9	638.2	275.5	34.9	1.000181
14500.0	590.8	-5.6	26.4	768.7	637.5	274.2	37.9	1.000177
15000.0	579.5	-6.4	24.0	756.3	636.5	273.1	40.9	1.000173
15500.0	568.3	-7.4	24.0	744.6	635.2	271.3	41.4	1.000170
16000.0	557.3	-8.5	24.0	733.1	634.0	269.5	42.0	1.000167
16500.0	546.4	-9.4	25.2	721.3	632.9	267.6	42.6	1.000165
17000.0	535.8	-10.1	28.1	709.1	632.0	266.3	43.2	1.000162
17500.0	525.3	-10.8	31.0	697.2	631.1	266.4	43.8	1.000160
18000.0	514.9	-12.3	31.8	687.3	629.4	266.4	44.2	1.000157
18500.0	504.8	-13.7	32.6	677.5	627.7	266.4	44.5	1.000155
19000.0	494.7	-15.1	33.0	667.6	625.9	266.8	45.3	1.000152
19500.0	484.8	-16.5	33.0	657.7	624.2	267.5	46.5	1.000150
20000.0	475.0	-17.9	33.0	648.0	622.6	268.5	47.4	1.000147
20500.0	465.4	-19.3	33.0	638.4	620.9	269.9	47.6	1.000145
21000.0	456.0	-20.6	33.0	629.0	619.2	269.8	47.5	1.000142
21500.0	446.9	-22.0	33.0	619.7	617.4	267.4	47.1	1.000140
22000.0	437.7	-23.0	33.0	609.4	616.2	266.9	47.6	1.000134
22500.0	428.7	-24.0	33.0	599.2	615.0	262.5	49.7	1.000135
23000.0	419.8	-25.0	33.0	589.2	613.8	260.6	51.9	1.000133

STATION ALTITUDE 5489.00 FEET
 11 APR. 80 0820 HRS M.T.
 ASCENSION NO. 192

WIND DIRECTION
 102.5 DEGS
 WHITE CLOUD

WIND SPEED
 52.40000 KTS
 102.37033 LON DEG

TABLE 5 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	411.1	-26.3	-37.2	34.7	580.1	612.2	260.3	54.3	1.000131
24000.0	402.6	-27.8	-37.9	37.2	571.5	610.2	260.0	56.2	1.000129
24500.0	394.1	-29.1	-39.0	37.4	562.5	608.6	259.8	56.2	1.000127
25000.0	385.8	-30.3	-40.4	36.5	553.4	607.1	259.8	56.5	1.000124
25500.0	377.6	-31.6	-41.2	37.9	544.6	605.5	260.0	58.4	1.000122
26000.0	369.6	-33.0	-41.5	42.2	536.1	603.7	261.0	60.0	1.000120
26500.0	361.7	-34.4	-41.8	46.5	527.7	602.0	263.2	60.5	1.000119
27000.0	353.9	-35.2	-43.3	42.9	518.0	601.0	264.6	60.2	1.000116
27500.0	346.2	-35.9	-44.9	38.8	508.4	600.1	265.4	57.6	1.000114
28000.0	338.7	-36.8	-46.0	37.7	499.3	598.9	265.7	55.7	1.000112
28500.0	331.4	-37.7	-47.0	36.5	490.3	597.8	264.0	55.2	1.000110
29000.0	324.1	-38.8	-48.2	35.7	481.7	596.4	263.6	55.9	1.000108
29500.0	317.0	-40.0	-49.4	35.1	473.6	594.9	262.8	57.6	1.000106
30000.0	310.0	-41.1	-53.9	23.3**	465.3	593.5	261.9	60.2	1.000104
30500.0	303.2	-42.1	-63.6	7.4**	457.1	592.2	261.0	63.1	1.000102
31000.0	296.4	-43.1			448.8	590.9	260.3	63.4	1.000100
31500.0	289.8	-43.9			440.4	589.8	259.5	63.3	1.000098
32000.0	283.3	-44.9			432.4	588.0	259.2	62.7	1.000096
32500.0	276.9	-46.1			424.8	587.0	258.9	62.1	1.000095
33000.0	270.6	-47.3			417.3	585.4	258.9	63.7	1.000093
33500.0	264.4	-48.5			410.1	583.9	258.9	65.0	1.000091
34000.0	258.4	-49.8			402.9	582.3	259.3	67.0	1.000090
34500.0	252.5	-51.0			395.9	580.7	259.0	67.8	1.000088
35000.0	246.7	-51.8			388.3	579.6	260.7	68.2	1.000086
35500.0	241.0	-52.4			380.2	578.8	262.5	67.3	1.000085
36000.0	235.4	-53.3			373.0	577.6	264.4	66.4	1.000083
36500.0	229.9	-54.4			366.1	576.2	266.3	66.2	1.000082
37000.0	224.5	-55.5			359.3	574.8	268.3	66.1	1.000080
37500.0	219.2	-55.7			351.2	574.4	269.5	66.3	1.000078
38000.0	214.0	-56.0			343.3	574.1	270.5	66.7	1.000076
38500.0	209.0	-56.2			335.5	573.8	271.3	66.5	1.000075
39000.0	204.0	-56.4			328.0	573.5	271.9	65.7	1.000073
39500.0	199.2	-56.6			320.5	573.3	272.5	64.8	1.000071
40000.0	194.5	-56.7			313.1	573.2	273.0	64.0	1.000070
40500.0	189.9	-56.8			305.8	573.1	273.4	63.5	1.000068
41000.0	185.4	-55.4			296.7	574.9	273.4	64.8	1.000066
41500.0	181.1	-54.6			288.7	575.9	273.3	66.2	1.000064
42000.0	176.9	-53.3			280.2	577.7	272.4	67.0	1.000062
42500.0	172.7	-52.9			273.2	578.2	272.5	68.5	1.000061
43000.0	168.7	-53.8			267.8	577.0	272.4	69.7	1.000060

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
 11 APR. 80 0820 HRS MST
 ASCENSION NO. 192

UPPER AIR DATA
 1020020192
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT LEG
 106.37033 LONG LEG

TABLE 5 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (T)	SPEED KNOTS	INDEX OF REFRACTION
43500.0	164.7	-54.7			262.6	575.8	272.3	69.0	1.000058
44000.0	160.8	-55.6			257.5	574.6	272.2	69.3	1.000057
44500.0	157.1	-56.5			252.5	573.5	272.1	68.6	1.000056
45000.0	153.4	-57.4			247.6	572.3	271.9	67.8	1.000055
45500.0	149.8	-58.3			242.8	571.1	271.6	67.0	1.000054
46000.0	146.2	-57.5			236.2	572.1	271.4	66.1	1.000053
46500.0	142.7	-56.6			229.6	573.3	272.4	64.1	1.000051
47000.0	139.3	-57.1			224.7	572.6	273.4	62.2	1.000050
47500.0	136.0	-57.6			219.8	572.0	276.2	60.5	1.000049
48000.0	132.8	-58.1			215.1	571.4	280.1	59.1	1.000048
48500.0	129.7	-58.5			210.5	570.7	283.7	58.2	1.000047
49000.0	126.6	-58.4			205.3	570.9	286.9	58.0	1.000046
49500.0	123.6	-58.2			200.3	571.2	289.6	57.4	1.000045
50000.0	120.6	-58.0			195.3	571.5	290.4	55.3	1.000043
50500.0	117.8	-58.0			190.6	571.5	291.2	53.1	1.000042
51000.0	114.9	-58.7			186.7	570.6	292.0	50.1	1.000042
51500.0	112.2	-59.4			182.8	569.6	292.8	47.1	1.000041
52000.0	109.5	-60.1			179.0	568.7	294.1	44.4	1.000040
52500.0	106.9	-60.6			175.2	568.0	295.7	41.8	1.000039
53000.0	104.3	-61.0			171.3	567.5	298.1	39.4	1.000038
53500.0	101.8	-61.3			167.4	567.0	302.6	33.4	1.000037
54000.0	99.3	-61.6			163.6	566.6	308.6	28.7	1.000036
54500.0	96.9	-61.7			159.7	566.5	317.6	24.2	1.000036
55000.0	94.6	-61.7			155.9	566.5	330.1	20.6	1.000035
55500.0	92.3	-61.8			152.2	566.4	333.6	20.1	1.000034
56000.0	90.1	-62.2			148.7	565.8	334.8	20.0	1.000033
56500.0	87.9	-62.6			145.4	565.2	330.7	19.9	1.000032
57000.0	85.7	-63.1			142.2	564.6	323.6	20.1	1.000032
57500.0	83.6	-63.5			139.0	564.0	317.3	20.0	1.000031
58000.0	81.6	-64.0			135.9	563.4	311.6	19.4	1.000030
58500.0	79.6	-64.4			132.9	562.8	305.7	19.0	1.000030
59000.0	77.7	-64.9			129.9	562.2	303.4	19.4	1.000029
59500.0	75.8	-65.3			127.0	561.6	301.8	19.9	1.000028
60000.0	73.9	-65.2			123.8	561.8	301.2	20.4	1.000028
60500.0	72.1	-62.1			119.0	566.0	302.5	20.8	1.000027
61000.0	70.4	-60.1			115.1	568.6	303.6	21.2	1.000026
61500.0	68.7	-60.4			112.5	568.3	304.0	21.5	1.000025
62000.0	67.0	-60.9			110.1	567.5	304.2	21.6	1.000025
62500.0	65.4	-61.1			107.5	567.3	304.4	22.1	1.000024
63000.0	63.9	-59.7			104.2	569.2	304.7	22.3	1.000023

STATION ALTITUDE 3989.00 FEET; MSL
11 APR. 80 0820 HRS MST
ASCENSION NO. 192

UPPER AIR DATA
1020020192
WHITE SANDS

GEOGRAPHIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 5 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	62.3	-58.3		101.1	571.1	305.0	22.5	1.000023
64000.0	60.9	-56.8		98.0	573.0	308.9	20.1	1.000022
64500.0	59.4	-56.9		95.7	572.8	317.6	16.3	1.000021
65000.0	58.0	-57.7		93.8	571.8	331.0	13.1	1.000021
65500.0	56.6	-58.5		91.9	570.7	338.1	10.2	1.000020
66000.0	55.3	-59.3		90.0	569.7	349.7	7.7	1.000020
66500.0	54.0	-60.1		88.2	568.6	7.2	5.6	1.000020
67000.0	52.7	-60.9		86.5	567.5	344.4	3.5	1.000019
67500.0	51.4	-60.6		84.3	568.0	294.0	2.8	1.000019
68000.0	50.2	-60.0		82.0	568.8	257.6	3.6	1.000018
68500.0	49.0	-59.4		79.8	569.6	225.1	2.0	1.000018
69000.0	47.8	-58.8		77.7	570.4	161.4	2.2	1.000017
69500.0	46.7	-58.2		75.7	571.2	128.6	3.8	1.000017
70000.0	45.6	-57.6		73.7	571.9	106.2	5.9	1.000016
70500.0	44.5	-57.0		71.7	572.7	96.3	8.4	1.000016
71000.0	43.4	-56.4		69.8	573.5	92.0	10.2	1.000016
71500.0	42.4	-55.8		68.0	574.3	90.9	10.1	1.000015
72000.0	41.4	-55.6		66.3	574.6	89.8	10.0	1.000015
72500.0	40.4	-55.7		64.8	574.5	87.6	10.0	1.000014
73000.0	39.5	-55.7		63.3	574.4	82.2	10.8	1.000014
73500.0	38.6	-55.8		61.8	574.4	77.5	11.7	1.000014
74000.0	37.7	-55.8		60.4	574.3	73.7	12.6	1.000013
74500.0	36.8	-55.9		59.0	574.2	71.7	13.3	1.000013
75000.0	35.9	-55.9		57.6	574.2	69.9	14.0	1.000013
75500.0	35.1	-56.0		56.3	574.1	68.2	14.7	1.000013
76000.0	34.2	-56.0		54.9	574.0	77.5	15.7	1.000012
76500.0	33.4	-56.1		53.7	574.0	85.7	17.1	1.000012
77000.0	32.7	-56.1		52.4	573.9	92.6	18.9	1.000012
77500.0	31.9	-56.2		51.2	573.8	96.6	20.0	1.000011
78000.0	31.1	-55.8		49.9	574.4	99.9	21.0	1.000011
78500.0	30.4	-55.1		48.6	575.3	103.0	22.2	1.000011
79000.0	29.7	-54.5		47.3	576.0	105.6	21.3	1.000011
79500.0	29.0	-54.1		46.1	576.6	108.6	19.5	1.000010
80000.0	28.3	-53.6		45.0	577.2	112.2	17.7	1.000010
80500.0	27.7	-53.2		43.9	577.8	115.7	16.6	1.000010
81000.0	27.0	-52.8		42.8	578.4	118.6	16.2	1.000010
81500.0	26.4	-52.3		41.7	578.9	121.6	15.8	1.000009
82000.0	25.8	-51.9		40.6	579.5	123.5	15.3	1.000009
82500.0	25.2	-51.4		39.6	580.1	115.9	13.7	1.000009
83000.0	24.6	-51.0		38.6	580.6	106.4	12.3	1.000009

STATION ALTITUDE 3989.00 FEET MSL
 11 APR. 80 0820 HRS MST
 ASCENSION NO. 192

UPPER AIR DATA
 1020020192
 WHITE SANDS
 TABLE 5 (CONT)

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (T ₀)	INDEX OF REFRACTION
83500.0	24.1	-50.6		37.7	581.2	95.0	11.3
84000.0	23.5	-50.3		36.7	581.6	87.9	11.4
84500.0	23.0	-50.6		36.0	581.2	82.0	11.7
85000.0	22.4	-50.9		35.2	580.8	76.6	12.2
85500.0	21.9	-51.2		34.4	580.4	77.8	12.7
86000.0	21.4	-51.5		33.7	580.0	63.9	13.2
86500.0	20.9	-51.8		32.9	579.6	69.4	13.9
87000.0	20.5	-51.9		32.2	579.5	94.3	14.6
87500.0	20.0	-51.8		31.4	579.6	98.7	15.1
88000.0	19.5	-51.3		30.7	580.3	102.8	15.7
88500.0	19.1	-50.8		29.9	580.9	106.6	16.4
89000.0	18.7	-50.3		29.2	581.5	112.4	16.4
89500.0	18.2	-49.9		28.4	582.2	118.4	16.5
90000.0	17.8	-49.4		27.7	582.8	124.2	16.7
90500.0	17.4	-48.9		27.0	583.4	129.6	16.7
91000.0	17.0	-48.4		26.4	584.0	130.9	15.9
91500.0	16.6	-47.9		25.7	584.7	133.2	15.1
92000.0	16.3	-47.4		25.1	585.3	135.7	14.3
92500.0	15.9	-47.0		24.5	585.9	139.0	13.5
93000.0	15.5	-46.5		23.9	586.5	144.3	12.4
93500.0	15.2	-46.0		23.3	587.1	150.4	11.5
94000.0	14.8	-45.5		22.7	587.8	157.5	10.7
94500.0	14.5	-45.2		22.1	588.2	165.0	10.2
95000.0	14.2	-45.1		21.6	588.3	170.4	9.9
95500.0	13.9	-45.1		21.2	588.3	175.9	9.8
96000.0	13.5	-45.0		20.7	588.4	181.7	9.7
96500.0	13.2	-45.0		20.2	588.5	187.1	9.7
97000.0	12.9	-44.9		19.8	588.6	185.0	9.7
97500.0	12.7	-44.9		19.3	588.6	182.9	9.7
98000.0	12.4	-44.8		18.9	588.7	180.7	9.7
98500.0	12.1	-44.8		18.5	588.8	178.6	9.7
99000.0	11.8	-44.7		18.0	588.8		
99500.0	11.6	-44.7		17.6	588.9		
100000.0	11.3	-44.6		17.2	589.0		
100500.0	11.1	-44.5		16.8	589.0		
101000.0	10.8	-44.5		16.5	589.1		
101500.0	10.6	-44.4		16.1	589.2		

STATION ALTITUDE 3989.00 FEET MS
11 APR. 80
ASCENSION NO. 192

MANDALAY LEVELS
1020020192
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 6

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	
850.0	4732.	18.0	1.5	33.
800.0	6421.	13.8	-1.5	35.
750.0	8191.	9.3	-4.9	36.
650.0	10051.	4.4	-8.6	38.
600.0	12011.	-1.2	-11.4	46.
550.0	14087.	-5.1	-19.9	30.
500.0	16314.	-9.2	-25.8	24.
450.0	18714.	-14.4	-27.1	33.
400.0	21298.	-21.6	-33.5	33.
350.0	24112.	-28.3	-38.1	38.
300.0	27204.	-35.6	-44.1	41.
250.0	30674.	-42.6		
200.0	34640.	-51.5		
175.0	39325.	-56.6		
150.0	42118.	-52.7		
125.0	45345.	-58.2		
100.0	49119.	-58.3		
80.0	53700.	-61.6		
70.0	58216.	-64.3		
60.0	60902.	-59.9		
50.0	64067.	-56.6		
40.0	67814.	-59.9		
30.0	72443.	-55.7		
25.0	78450.	-54.7		
20.0	82308.	-51.3		
15.0	87069.	-51.8		
	93272.	-45.8		

WIN DATA		SPEED KNOTS
DIRECTION DEGREES(TN)		
149.8	1.7	
280.1	9.0	
278.1	10.0	
281.5	23.7	
273.4	21.7	
275.3	35.5	
268.2	42.4	
265.4	44.7	
268.2	47.3	
259.9	50.2	
265.0	59.0	
260.7	63.4	
260.1	60.2	
272.4	60.0	
272.8	60.5	
271.6	67.1	
288.4	57.9	
306.4	30.2	
307.2	19.0	
303.8	21.2	
313.0	10.1	
256.4	3.5	
85.4	10.3	
104.3	20.2	
113.6	10.3	
98.2	10.0	
153.0	11.2	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

SIGNIFICANT LEVEL DATA
1020010108
HOLLOMAN
TABLE 7

STATION ALTITUDE 4126.59 FEET MSL
11 APR. 80 0730 HRS MST
ASCENSION NO. 108

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
868.8 4126.6	16.8 4.5	44.0
850.0 4738.4	16.4 2.8	40.0
793.9 6632.5	12.3 -.9	40.0
700.0 10045.5	3.6 -5.6	51.0
637.0 12532.7	-2.9 -11.1	53.0
585.3 14714.7	-8.5 -18.5	44.0
568.5 15457.3	-8.6 -20.9	36.0
500.0 18688.1	-15.5 -21.9	58.0
400.0 24089.0	-28.6 -37.9	40.0
384.4 25022.5	-30.8 -38.2	48.0
362.2 26399.4	-35.3 -38.1	75.0
351.0 27117.5	-36.7 -41.3	62.0
329.9 28522.8	-39.4 -45.8	50.0
300.0 30644.9	-43.6 -50.3	47.0
250.0 34606.7	-52.1	
218.5 37443.0	-57.6	
207.9 38479.3	-56.8	
200.0 39286.0	-57.9	
185.6 40849.5	-54.8	
172.3 42413.9	-55.6	
165.6 43250.1	-53.9	
150.0 45322.6	-58.5	
145.9 45898.2	-57.6	
139.3 46859.8	-58.5	
131.7 48020.2	-59.5	
121.1 49760.4	-57.4	
107.6 52205.9	-60.6	
100.0 53709.7	-60.8	
88.2 56283.7	-61.3	
79.0 58512.6	-66.4	
73.8 59896.5	-59.5	
70.0 60984.3	-61.2	
61.4 63695.6	-57.4	
53.9 66390.3	-61.3	
53.3 66621.7	-57.6	
50.0 67952.6	-58.3	
46.4 69504.2	-58.9	
39.3 72984.7	-54.4	
33.1 76602.4	-56.7	
30.0 78669.8	-55.5	

STATION ALTITUDE 4126.59 FEET MSL
 11 APR. 80
 ASCENSION NO. 108

SIGNIFICANT LEVEL DATA
 1020010108
 HOLLOMAN

GEODETIC COORDINATES
 32.60865 LAT DEG
 106.09965 LON DEG

TABLE 7 (CONT)

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
24.0	83423.2	-51.1		
21.3	85983.1	-52.6		
20.0	87332.0	-51.8		
16.0	92165.1	-47.8		

STATION ALTITUDE 4126.59 FEET MSL
11 APR. 80 0730 HRS MST
ASCENSION NO. 108

UPPER AIR DATA
1020010108
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 8

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4126.6	868.8	16.8	44.0	1040.0	664.6	220.0	4.1	1.000270
4500.0	857.3	16.6	41.6	1027.3	664.2			1.000264
5000.0	842.0	15.8	40.0	1011.8	663.3			1.000258
5500.0	827.0	14.8	40.0	997.6	662.0			1.000253
6000.0	812.2	13.7	40.0	983.6	660.7			1.000248
6500.0	797.7	12.6	40.0	969.9	659.4			1.000243
7000.0	783.2	11.4	41.2	956.4	658.0			1.000239
7500.0	768.9	10.1	42.8	943.2	656.5			1.000235
8000.0	754.9	8.8	44.4	930.3	655.0			1.000231
8500.0	741.1	7.5	46.0	917.5	653.5			1.000227
9000.0	727.5	6.3	47.6	904.9	652.0			1.000224
9500.0	714.2	5.0	49.2	892.5	650.5			1.000220
10000.0	701.2	3.7	50.9	880.3	648.9			1.000216
10500.0	688.0	2.4	51.4	868.0	647.4			1.000212
11000.0	675.1	1.1	51.8	855.9	645.8			1.000208
11500.0	662.4	-.2	52.2	844.0	644.2			1.000204
12000.0	650.0	-1.5	52.6	832.2	642.6			1.000200
12500.0	637.8	-2.8	53.0	820.6	641.0	263.0	25.6	1.000196
13000.0	625.6	-4.1	51.1	808.8	639.5	264.4	27.5	1.000192
13500.0	613.5	-5.4	49.0	797.2	637.9	265.6	29.3	1.000188
14000.0	601.8	-6.7	46.9	785.8	636.3	266.8	31.0	1.000184
14500.0	590.2	-7.9	44.9	774.5	634.7	266.5	33.1	1.000181
15000.0	578.8	-8.5	40.9	761.3	634.0	266.1	35.2	1.000177
15500.0	567.5	-8.7	36.3	747.0	633.8	266.3	38.0	1.000173
16000.0	556.4	-9.8	39.7	735.3	632.5	266.4	40.6	1.000168
16500.0	545.4	-10.8	43.1	723.7	631.2	266.3	42.4	1.000165
17000.0	534.7	-11.9	46.5	712.4	629.9	265.8	43.6	1.000162
17500.0	524.2	-13.0	49.9	701.2	628.7	264.9	44.2	1.000160
18000.0	513.9	-14.0	53.3	690.3	627.4	264.1	44.6	1.000157
18500.0	503.8	-15.1	56.7	679.5	626.1	263.5	45.0	1.000155
19000.0	493.6	-16.3	57.0	668.9	624.6	262.9	46.4	1.000152
19500.0	483.5	-17.5	55.3	658.3	623.1	262.5	48.1	1.000149
20000.0	473.6	-18.7	53.6	648.0	621.6	262.3	48.8	1.000146
20500.0	463.9	-19.9	52.0	637.8	620.1	262.9	49.3	1.000143
21000.0	454.5	-21.1	50.3	627.8	618.6	263.5	49.1	1.000141
21500.0	445.2	-22.3	48.6	618.0	617.1	264.1	48.7	1.000138
22000.0	436.1	-23.5	47.0	608.3	615.6	264.6	51.1	1.000136
22500.0	427.1	-24.7	45.3	598.8	614.1	264.8	53.3	1.000133
23000.0	418.4	-26.0	43.6	589.5	612.6	264.0	54.3	1.000130
23500.0	409.9	-27.2	42.0	580.3	611.1	262.9	55.4	1.000127
						260.8	57.3	1.000124

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 4126.59 FEET MSL
 11 APR. 80 0730 HRS MST
 ASCENSION NO. 108

UPPER AIR DATA
 1020010108
 HOLLOMAN

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.09965 LON DEG

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES (T))	SPEED KNOTS	INDEX OF REFRACTION
24000.0	401.5	-28.4	40.3	571.3	609.6	259.3	59.7	1.000129
24500.0	393.1	-29.6	43.5	562.0	608.1	258.6	63.2	1.000127
25000.0	384.8	-30.7	47.8	552.8	606.6	258.1	65.2	1.000125
25500.0	376.6	-32.4	57.4	544.7	604.6	258.0	65.0	1.000123
26000.0	368.5	-34.0	67.2	536.7	602.5	258.2	64.8	1.000121
26500.0	360.6	-35.5	73.2	528.5	600.6	258.9	64.9	1.000119
27000.0	352.8	-36.5	64.1	519.2	599.4	259.7	65.2	1.000117
27500.0	345.1	-37.4	58.7	510.0	598.2	260.5	65.7	1.000115
28000.0	337.6	-38.4	54.5	500.9	596.9	260.4	64.3	1.000112
28500.0	330.2	-39.4	50.2	492.0	595.7	259.7	61.9	1.000110
29000.0	322.9	-40.3	49.3	483.2	594.4	259.0	60.2	1.000108
29500.0	315.8	-41.3	48.6	474.5	593.2	258.2	59.5	1.000106
30000.0	308.8	-42.3	47.9	466.0	591.9	257.7	61.2	1.000104
30500.0	302.0	-43.3	47.2	457.6	590.6	257.3	64.7	1.000102
31000.0	295.1	-44.4	42.8**	449.4	589.3	256.9	68.9	1.000100
31500.0	288.4	-45.4	36.9**	441.2	587.9	256.4	70.7	1.000099
32000.0	281.9	-46.5	30.9**	433.2	586.5	255.8	72.3	1.000097
32500.0	275.5	-47.6	25.0**	425.4	585.1	255.1	73.5	1.000095
33000.0	269.2	-48.7	19.1**	417.7	583.7	254.5	75.1	1.000093
33500.0	263.1	-49.7	13.1**	410.2	582.3	254.4	78.3	1.000091
34000.0	257.1	-50.8	7.2**	402.8	580.9	254.3	81.6	1.000090
34500.0	251.2	-51.9	1.3**	395.5	579.5	254.8	81.1	1.000088
35000.0	245.4	-52.9		388.0	578.2	255.4	80.3	1.000086
35500.0	239.6	-53.8		380.6	576.9	256.2	77.9	1.000085
36000.0	234.0	-54.8		373.3	575.7	257.1	74.5	1.000083
36500.0	228.5	-55.8		366.2	574.4	257.7	72.4	1.000082
37000.0	223.1	-56.7		359.2	573.1	258.2	71.2	1.000080
37500.0	217.9	-57.6		352.1	572.0	258.4	70.5	1.000078
38000.0	212.7	-57.2		343.1	572.5	258.8	70.0	1.000076
38500.0	207.7	-56.8		334.5	573.0	259.0	69.0	1.000074
39000.0	202.8	-57.5		327.6	572.1	259.0	67.8	1.000073
39500.0	198.0	-57.5		319.8	572.1	260.2	67.1	1.000071
40000.0	193.3	-56.5		310.8	573.4	261.5	66.4	1.000069
40500.0	188.7	-55.5		302.1	574.8	263.5	65.9	1.000067
41000.0	184.3	-54.9		294.1	575.6	265.6	65.5	1.000066
41500.0	179.9	-55.1		287.5	575.2	267.4	64.0	1.000064
42000.0	175.7	-55.4		281.1	574.9	269.0	61.6	1.000063
42500.0	171.6	-55.4		274.6	574.8	270.7	59.2	1.000061
43000.0	167.6	-54.4		266.9	570.2	272.3	56.8	1.000059
43500.0	163.6	-54.5		260.7	576.1	274.0	54.4	1.000058

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
11 APR. 80 0730 HRS MST
ASCENSION NO. 108

UPPER AIR DATA
1020010108
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	159.8	-55.6		255.8	574.7	275.7	54.3	1.000057
44500.0	156.0	-56.7		251.1	573.2	277.4	54.4	1.000056
45000.0	152.3	-57.8		246.4	571.7	278.7	56.4	1.000055
45500.0	148.7	-58.2		241.1	571.1	279.8	59.1	1.000054
46000.0	145.2	-57.7		234.7	571.8	281.2	61.4	1.000052
46500.0	141.7	-58.2		229.7	571.2	282.6	63.6	1.000051
47000.0	138.4	-58.6		224.7	570.6	284.0	65.5	1.000050
47500.0	135.1	-59.1		219.7	570.0	285.6	66.2	1.000049
48000.0	131.8	-59.5		214.9	569.5	287.1	67.0	1.000048
48500.0	128.7	-58.9		209.3	570.2	288.0	67.1	1.000047
49000.0	125.6	-58.3		203.7	571.0	288.9	67.1	1.000045
49500.0	122.6	-57.7		198.3	571.8	289.0	65.9	1.000044
50000.0	119.7	-57.7		193.6	571.8	288.5	63.8	1.000043
50500.0	116.8	-58.4		189.5	570.9	288.1	61.2	1.000042
51000.0	114.1	-59.0		185.6	570.1	287.8	56.9	1.000041
51500.0	111.3	-59.7		181.7	569.2	287.5	52.6	1.000040
52000.0	108.7	-60.3		177.9	568.3	288.8	47.6	1.000040
52500.0	106.1	-60.6		173.9	567.9	290.5	42.6	1.000039
53000.0	103.5	-60.7		169.7	567.8	293.3	38.5	1.000038
53500.0	101.0	-60.8		165.7	567.7	296.9	34.9	1.000037
54000.0	98.6	-60.9		161.8	567.6	299.3	33.3	1.000036
54500.0	96.2	-61.0		158.0	567.5	300.0	32.9	1.000035
55000.0	93.9	-61.1		154.2	567.4	301.8	32.6	1.000034
55500.0	91.6	-61.1		150.6	567.2	302.0	32.3	1.000034
56000.0	89.4	-61.2		147.0	567.1	302.1	32.1	1.000033
56500.0	87.3	-61.8		143.8	566.4	303.7	30.7	1.000032
57000.0	85.1	-62.9		141.1	564.8	305.7	29.0	1.000031
57500.0	83.1	-64.1		138.4	563.3	307.8	27.5	1.000031
58000.0	81.0	-65.2		135.8	561.8	309.6	26.6	1.000030
58500.0	79.0	-66.4		133.2	560.2	311.6	25.7	1.000030
59000.0	77.1	-64.0		128.4	563.5	313.4	24.7	1.000029
59500.0	75.3	-61.5		123.8	566.8	315.2	23.7	1.000028
60000.0	73.4	-59.7		119.8	569.2	317.2	22.6	1.000027
60500.0	71.7	-60.4		117.4	568.2	319.0	21.1	1.000026
61000.0	69.9	-61.2		115.0	567.2	321.1	19.7	1.000026
61500.0	68.3	-60.5		111.8	568.1	323.0	18.0	1.000025
62000.0	66.6	-59.8		108.8	569.1	325.8	16.1	1.000024
62500.0	65.1	-59.1		105.9	570.0	330.9	14.3	1.000024
63000.0	63.5	-58.4		103.0	570.9	335.0	12.2	1.000023
63500.0	62.0	-57.7		100.2	571.9	340.5	10.3	1.000022

STATION ALTITUDE 4126.59 FEET MSL
11 APR. 80 0730 HRS MST
ASCENSION NO. 108

UPPER AIR DATA
1020610108
HOLLOMAN

GEODETIC COORDINATES
32.64865 LAT DEG
106.09965 LON DEG

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (N)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	60.5	-57.8		97.9	571.6	345.4	8.6	1.000022
64500.0	59.1	-58.6		95.9	570.7	341.6	7.3	1.000021
65000.0	57.6	-59.3		93.9	569.7	336.3	6.2	1.000021
65500.0	56.3	-60.0		92.0	568.8	331.2	5.1	1.000020
66000.0	54.9	-60.7		90.1	567.8	325.8	4.2	1.000020
66500.0	53.6	-59.5		87.4	569.4	317.6	3.3	1.000019
67000.0	52.3	-57.8		84.7	571.7	346.3	1.9	1.000019
67500.0	51.1	-58.1		82.8	571.4	47.5	1.9	1.000018
68000.0	49.9	-58.3		80.9	571.0	76.1	3.5	1.000018
68500.0	48.7	-58.5		79.0	570.8	83.1	5.8	1.000018
69000.0	47.5	-58.7		77.2	570.5	85.2	8.1	1.000017
69500.0	46.4	-58.9		75.5	570.2	87.4	9.8	1.000017
70000.0	45.3	-58.3		73.5	571.1	87.9	11.0	1.000016
70500.0	44.2	-57.6		71.5	571.9	88.3	12.3	1.000016
71000.0	43.2	-57.0		69.6	572.8	86.6	12.3	1.000015
71500.0	42.2	-56.3		67.8	573.7	84.4	12.2	1.000015
72000.0	41.2	-55.7		66.0	574.5	82.2	12.0	1.000015
72500.0	40.2	-55.0		64.2	575.4	78.1	12.2	1.000014
73000.0	39.3	-54.4		62.5	576.2	74.1	12.4	1.000014
73500.0	38.4	-54.7		61.2	575.8	70.8	12.7	1.000014
74000.0	37.5	-55.0		59.8	575.3	72.8	13.3	1.000013
74500.0	36.6	-55.4		58.5	574.9	74.9	14.0	1.000013
75000.0	35.7	-55.7		57.2	574.5	76.9	14.6	1.000013
75500.0	34.9	-56.0		56.0	574.1	80.7	14.9	1.000012
76000.0	34.1	-56.3		54.7	573.7	84.3	15.3	1.000012
76500.0	33.3	-56.6		53.5	573.2	87.4	15.8	1.000012
77000.0	32.5	-56.5		52.2	573.5	88.0	15.9	1.000012
77500.0	31.7	-56.2		50.9	573.8	88.5	16.1	1.000011
78000.0	31.0	-55.9		49.7	574.2	89.0	16.3	1.000011
78500.0	30.2	-55.6		48.4	574.6	89.0	16.6	1.000011
79000.0	29.5	-55.2		47.2	575.1	89.0	16.8	1.000011
79500.0	28.9	-54.7		46.0	575.8	89.3	17.1	1.000010
80000.0	28.2	-54.3		44.9	576.4	94.2	17.3	1.000010
80500.0	27.5	-53.8		43.7	577.0	98.8	17.7	1.000010
81000.0	26.9	-53.3		42.6	577.6	103.3	18.2	1.000009
81500.0	26.3	-52.9		41.5	578.2	102.6	18.7	1.000009
82000.0	25.7	-52.4		40.5	578.8	102.0	19.3	1.000009
82500.0	25.1	-52.0		39.5	579.4	101.3	19.9	1.000009
83000.0	24.5	-51.5		38.5	580.0	95.8	19.2	1.000009
83500.0	23.9	-51.1		37.5	580.5	89.4	18.7	1.000008

STATION ALTITUDE 4126.59 FEET MSL
11 APR. 60 0730 HRS MST
ASCENSION NO. 108

UPPER AIR DATA
1020010108
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT LEG
106.69965 LONG LEG

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
84000.0	23.4	-51.4		36.7	560.1	82.7	18.4	1.000008
84500.0	22.8	-51.7		35.9	579.7	81.6	16.1	1.000008
85000.0	22.3	-52.0		35.1	579.3	81.8	17.8	1.000008
85500.0	21.8	-52.3		34.4	578.9	81.9	17.6	1.000008
86000.0	21.3	-52.6		33.6	578.6	83.2	16.5	1.000007
86500.0	20.8	-52.3		32.8	579.0	85.3	15.1	1.000007
87000.0	20.3	-52.0		32.0	579.4	87.8	13.7	1.000007
87500.0	19.8	-51.7		31.2	579.8	90.8	12.6	1.000007
88000.0	19.4	-51.2		30.4	580.3	94.3	11.6	1.000007
88500.0	19.0	-50.8		29.7	580.9	98.3	10.6	1.000007
89000.0	18.5	-50.4		29.0	581.4	105.3	10.7	1.000006
89500.0	18.1	-50.0		28.2	582.0	113.3	12.0	1.000006
90000.0	17.7	-49.6		27.6	582.5	119.7	13.4	1.000006
90500.0	17.3	-49.2		26.9	583.0			1.000006
91000.0	16.9	-48.8		26.2	583.6			1.000006
91500.0	16.5	-48.4		25.6	584.1			1.000006
92000.0	16.1	-47.9		24.9	584.6			1.000006

STATION ALTITUDE 4126.59 FEET MSL
11 APR. 80 0730 HRS MST
ASCENSION NO. 108

MANDAY ISLANDS
102 40100
HOLLAND

GEODETIC COORDINATES
32.88885 LAT DEG
106.09965 LONG DEG

TABLE 9

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIN. DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	4735.	16.4	2.8	40.	9999.0	9999.0XX	
800.0	6417.	12.8	-5	40.	9999.0	9999.0XX	
750.0	8181.	8.4	-2.9	45.	9999.0	9999.0XX	
700.0	10036.	3.6	-5.6	51.	9999.0	9999.0XX	
650.0	11993.	-1.5	-9.9	53.	263.0	25.6	
600.0	14064.	-6.9	-16.3	47.	266.4	33.4	
550.0	16278.	-10.4	-20.9	42.	266.2	43.4	
500.0	18663.	-15.5	-21.9	58.	262.7	47.0	
450.0	21242.	-21.7	-29.4	50.	264.4	50.0	
400.0	24050.	-28.6	-37.9	40.	259.1	60.3	
350.0	27135.	-36.8	-41.5	51.	259.9	65.3	
300.0	30586.	-43.6	-50.3	47.	257.2	63.8	
250.0	34534.	-52.1			254.9	81.0	
200.0	39194.	-57.9			259.5	67.4	
175.0	41983.	-55.4			269.2	61.3	
150.0	45204.	-58.5			279.4	58.0	
125.0	48963.	-58.2			289.0	67.1	
100.0	53547.	-60.8			298.4	33.5	
80.0	58072.	-65.8			310.5	20.2	
70.0	60779.	-61.2			320.9	19.8	
60.0	63950.	-58.1			344.4	8.2	
50.0	67701.	-58.3			74.1	3.2	
40.0	72326.	-54.9			77.4	12.2	
30.0	78338.	-55.5			89.0	16.6	
25.0	82183.	-51.9			101.3	19.9	
20.0	86928.	-51.8			89.5	13.0	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH, AND ELEVATION ANGLES.

GEODETIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

SIGNIFICANT LEVEL DATA
1020030100

JALLEN

TABLE 10

STATION ALTITUDE 4051.00 FEET MSL
11 APR. 80
0845 HRS MST
ASCENSION NO. 106

PRESSURE GEOMETRIC		TEMPERATURE		REL. HUM. PERCENT
MILLIBARS	ALTITUDE MSL FEET	AIR DEGREES	DEWPOINT CENTIGRADE	
871.0	4051.0	16.2	-6.8	20.0
850.0	4729.3	14.4	-4.3	27.0
784.8	6922.0	9.5	-7.2	30.0
756.2	7930.6	8.0	-7.7	32.0
700.0	10000.8	2.0	-10.2	40.0
647.2	12060.4	-3.3	-14.1	43.0
604.0	13844.2	-7.0	-22.8	27.0
562.0	15682.2	-9.8	-27.9	21.0
500.0	18605.4	-17.3	-33.0	24.0
400.0	23963.5	-30.6	-44.1	25.0
354.4	26755.2	-37.1	-49.1	27.0
300.0	30472.0	-46.5		
250.0	34386.0	-54.6		
236.8	35524.9	-56.4		
226.4	36465.5	-55.7		
216.6	37391.6	-56.8		
200.0	39064.6	-54.6		
188.4	40325.1	-54.5		
179.4	41355.3	-55.7		
176.7	41674.5	-54.5		
166.4	42935.1	-56.9		
150.0	45103.5	-56.5		
134.8	47325.4	-59.1		
117.0	50247.9	-59.9		
107.0	52077.0	-62.6		
100.0	53452.0	-63.0		
88.4	55935.0	-66.6		
85.6	56578.5	-66.0		
79.8	57974.7	-68.6		
74.2	59446.0	-59.4		
70.0	60641.6	-62.5		
63.6	62607.0	-59.9		
55.8	65288.8	-62.6		
53.6	66114.7	-59.3		
50.0	67554.0	-59.1		
43.4	70503.4	-55.9		
38.6	72964.3	-57.5		
30.0	78264.7	-54.5		
23.8	81159.0	-55.4		
20.0	86880.2	-49.5		

STATION ALTITUDE 4051.00 FEET
 11 APR. 80 0845 HRS MSL
 ASCENSION NO. 106

SIGNIFICANT LEVEL DATA
 103.30100
 CALLED
 TABLE TO

COORDINATES
 53.12712 177.463
 100.49511 204.220

PRESSURE GEOMETRIC	TEMPERATURE	REL. HUM.
ALTITUDE	AIR DEWPOINT	PERCENT
MILLIBARS MSL FEET	DEGREES CENTIGRADE	
13.8 94982.5	-46.5	

STATION ALTITUDE 4051.00 FEET MSL
11 APR. 80 0845 MRS MST
ASCENSION NO. 106

UPPER AIR DATA
1020030106
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 11

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	GEOM. CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (T)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	871.0	16.2	20.0	1047.0	603.2	0	0	1.000250
4500.0	857.0	15.0	24.6	1034.2	601.9	148.0	1.4	1.000250
5000.0	841.7	13.8	27.4	1019.8	600.6	148.0	3.1	1.000247
5500.0	826.5	12.7	28.1	1005.4	659.3	148.0	4.7	1.000243
6000.0	811.6	11.6	28.7	991.2	657.9	150.0	5.8	1.000239
6500.0	796.9	10.4	29.4	977.2	655.6	178.0	6.8	1.000235
7000.0	782.6	9.4	30.2	963.2	655.4	199.1	7.6	1.000231
7500.0	768.3	8.6	31.1	948.2	654.5	218.8	8.8	1.000228
8000.0	754.2	7.8	32.3	933.6	653.6	231.8	10.4	1.000224
8500.0	740.3	6.3	34.2	921.2	651.9	241.0	12.3	1.000221
9000.0	726.6	4.9	36.1	908.9	650.1	245.1	14.1	1.000218
9500.0	713.2	3.5	38.1	896.8	648.4	248.1	16.1	1.000215
10000.0	700.0	2.0	40.0	884.9	646.7	250.4	18.6	1.000211
10500.0	686.8	.7	40.7	872.4	645.2	252.5	21.2	1.000208
11000.0	673.9	-6	41.5	860.1	643.6	255.4	24.2	1.000204
11500.0	661.2	-1.9	42.2	847.9	642.1	258.3	26.8	1.000200
12000.0	648.7	-3.1	42.9	835.9	640.5	261.8	28.6	1.000197
12500.0	636.3	-4.2	39.1	823.3	639.2	265.0	31.2	1.000193
13000.0	624.1	-5.2	34.6	810.8	637.9	269.4	34.6	1.000189
13500.0	612.1	-6.3	30.1	798.5	636.6	270.1	37.5	1.000184
14000.0	600.3	-7.2	26.5	786.0	635.5	269.5	40.1	1.000180
14500.0	588.7	-8.0	24.9	773.0	634.5	267.4	41.3	1.000177
15000.0	577.2	-8.8	23.2	760.2	633.6	264.5	41.8	1.000173
15500.0	566.0	-9.5	21.6	747.6	632.7	263.5	42.5	1.000170
16000.0	554.9	-10.6	21.3	736.0	631.4	263.2	43.3	1.000167
16500.0	543.9	-11.9	21.8	725.0	629.8	264.1	43.6	1.000164
17000.0	533.2	-13.2	22.4	714.2	628.2	265.3	43.7	1.000162
17500.0	522.6	-14.5	22.9	703.5	626.7	265.3	43.9	1.000159
18000.0	512.3	-15.7	23.4	693.1	625.1	265.0	44.1	1.000157
18500.0	502.1	-17.0	23.9	682.8	623.6	264.7	43.7	1.000154
19000.0	491.9	-18.3	24.1	672.1	622.0	264.3	43.2	1.000152
19500.0	481.7	-19.5	24.2	661.5	620.5	264.2	42.3	1.000149
20000.0	471.8	-20.8	24.3	651.1	619.0	264.1	41.5	1.000147
20500.0	462.1	-22.0	24.4	640.8	617.5	263.3	41.1	1.000144
21000.0	452.5	-23.2	24.4	630.7	615.9	262.8	41.0	1.000142
21500.0	443.2	-24.5	24.5	620.8	614.4	263.1	41.7	1.000140
22000.0	434.1	-25.7	24.6	611.1	612.8	263.4	43.8	1.000137
22500.0	425.1	-27.0	24.7	601.5	611.3	263.7	47.7	1.000135
23000.0	416.4	-28.2	24.8	592.1	609.8	262.9	51.4	1.000133
23500.0	407.8	-29.4	24.9	582.9	608.2	261.3	55.1	1.000131

STATION ALTITUDE 4651.00 FEET MSL
 11 APR. 80 0845 HRS MST
 ASCENSION NO. 106

UPPER AIR DATA
 1020030103
 JALLEN

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49511 LON DEG

TABLE 11 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	399.4	-30.7	25.0	573.7	606.7	260.0	58.5	1.000129
24500.0	390.8	-31.8	25.4	564.1	605.2	259.0	61.7	1.000126
25000.0	382.4	-33.0	25.7	554.7	603.7	258.7	64.0	1.000124
25500.0	374.2	-34.2	26.1	545.5	602.3	259.1	65.0	1.000122
26000.0	366.2	-35.3	26.5	536.4	600.8	259.1	64.9	1.000120
26500.0	358.3	-36.5	26.8	527.5	599.3	258.7	62.8	1.000118
27000.0	350.5	-37.7	25.2**	518.6	597.8	258.3	61.3	1.000116
27500.0	342.8	-39.0	21.6**	509.9	596.2	258.4	61.2	1.000114
28000.0	335.2	-40.2	18.0**	501.3	594.6	258.5	61.1	1.000112
28500.0	327.7	-41.5	14.3**	492.9	592.9	258.9	61.3	1.000110
29000.0	320.5	-42.8	10.7**	484.6	591.3	259.2	61.3	1.000108
29500.0	313.4	-44.0	7.1**	476.5	589.7	259.2	60.9	1.000106
30000.0	306.4	-45.3	3.4**	468.5	588.1	259.2	62.0	1.000104
30500.0	299.6	-46.6		460.6	586.4	259.3	64.6	1.000103
31000.0	292.7	-47.6		452.1	585.1	259.5	67.3	1.000101
31500.0	286.0	-48.6		443.7	583.7	259.6	70.2	1.000099
32000.0	279.4	-49.7		435.5	582.4	259.4	72.1	1.000097
32500.0	273.0	-50.7		427.5	581.1	259.1	73.6	1.000095
33000.0	266.7	-51.7		419.6	579.7	258.5	74.2	1.000093
33500.0	260.5	-52.8		411.8	578.3	257.9	74.4	1.000092
34000.0	254.5	-53.8		404.2	577.0	257.5	74.7	1.000090
34500.0	248.6	-54.8		396.7	575.7	257.4	75.2	1.000088
35000.0	242.8	-55.6		388.7	574.7	257.5	75.7	1.000087
35500.0	237.1	-56.4		381.0	573.6	257.9	76.4	1.000085
36000.0	231.5	-56.0		371.4	574.0	258.2	76.7	1.000083
36500.0	226.0	-55.7		362.2	574.4	258.2	74.8	1.000081
37000.0	220.7	-55.3		354.6	573.6	258.3	73.0	1.000079
37500.0	215.5	-56.7		346.7	573.2	258.8	71.0	1.000077
38000.0	210.4	-56.0		337.6	574.1	259.4	69.0	1.000075
38500.0	205.5	-55.3		328.6	575.0	261.3	70.0	1.000073
39000.0	200.6	-54.7		319.9	575.8	263.4	71.4	1.000071
39500.0	195.9	-54.6		312.2	576.0	266.2	73.0	1.000070
40000.0	191.3	-54.5		304.9	576.0	269.2	74.7	1.000068
40500.0	186.8	-54.7		298.0	575.8	271.8	75.3	1.000066
41000.0	182.5	-55.3		291.7	575.0	274.2	73.9	1.000065
41500.0	178.2	-55.2		284.7	575.2	276.6	72.6	1.000063
42000.0	174.0	-55.1		278.0	575.2	278.3	69.0	1.000062
42500.0	169.9	-56.1		272.6	574.0	280.0	65.4	1.000061
43000.0	165.9	-56.9		267.2	572.9	281.6	62.1	1.000060
43500.0	162.0	-56.8		260.8	573.0	283.0	59.1	1.000058

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
11 APR. 80 0845 HRS MST
ASCENSION NO. 106

UPPER AIR DATA
1020030106
JALLEN
TABLE 11 (CONT)

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4400.0	158.1	-56.7		254.5	573.2	284.1	57.2	1.000057
44500.0	154.4	-56.6		248.4	573.3	284.3	57.5	1.000055
45000.0	150.7	-56.5		242.4	573.4	284.4	57.8	1.000054
45500.0	147.2	-57.0		237.1	572.8	284.7	57.6	1.000053
46000.0	143.7	-57.5		232.1	572.0	285.0	57.4	1.000052
46500.0	140.3	-58.1		227.2	571.3	285.5	56.0	1.000051
47000.0	136.9	-58.7		222.4	570.5	286.4	53.0	1.000050
47500.0	133.7	-59.1		217.6	569.9	287.3	50.0	1.000048
48000.0	130.5	-59.3		212.5	569.7	288.1	47.0	1.000047
48500.0	127.3	-59.4		207.6	569.5	288.9	44.1	1.000046
49000.0	124.3	-59.6		202.7	569.4	289.9	41.6	1.000045
49500.0	121.3	-59.7		198.0	569.2	291.3	40.6	1.000044
50000.0	118.4	-59.8		193.4	569.0	292.7	39.7	1.000043
50500.0	115.6	-60.3		189.1	568.4	294.5	39.2	1.000042
51000.0	112.8	-61.0		185.2	567.4	296.5	39.0	1.000041
51500.0	110.1	-61.7		181.4	566.4	298.5	38.7	1.000040
52000.0	107.4	-62.5		177.6	565.4	300.4	38.3	1.000040
52500.0	104.8	-62.7		173.5	565.1	302.4	37.9	1.000039
53000.0	102.2	-62.9		169.4	564.9	303.7	37.8	1.000038
53500.0	99.8	-63.1		165.4	564.7	304.3	38.0	1.000037
54000.0	97.3	-63.8		161.9	563.7	304.9	38.2	1.000036
54500.0	94.9	-64.5		158.5	562.7	304.7	37.6	1.000035
55000.0	92.6	-65.2		155.2	561.7	304.2	36.9	1.000035
55500.0	90.3	-66.0		151.9	560.8	303.9	35.9	1.000034
56000.0	88.1	-66.5		148.6	560.0	304.4	33.6	1.000033
56500.0	85.9	-66.1		144.6	560.6	305.0	31.4	1.000032
57000.0	83.8	-66.8		141.5	559.6	306.3	29.0	1.000032
57500.0	81.7	-67.7		138.6	558.4	308.4	26.5	1.000031
58000.0	79.7	-68.4		135.6	557.4	311.0	24.0	1.000030
58500.0	77.8	-65.3		130.3	561.6	313.1	21.8	1.000029
59000.0	75.9	-62.2		125.3	565.8	315.4	19.7	1.000028
59500.0	74.0	-59.5		120.7	569.4	318.3	17.6	1.000027
60000.0	72.2	-60.8		118.5	567.7	318.1	16.1	1.000026
60500.0	70.5	-62.1		116.4	565.9	317.7	14.5	1.000026
61000.0	68.8	-62.0		113.5	566.1	317.6	12.8	1.000025
61500.0	67.1	-61.4		110.4	566.4	322.8	10.4	1.000025
62000.0	65.5	-60.7		107.4	567.8	330.7	8.1	1.000024
62500.0	63.9	-60.0		104.5	568.7	344.6	6.1	1.000023
63000.0	62.4	-60.3		102.1	568.4	34.1	5.1	1.000023
63500.0	60.9	-60.8		99.9	567.7	37.6	5.3	1.000022

UPPER AIR DATA
1020030105
JALLEN
106.49511 LAT DEG
106.49511 LONG DEG

STATION ALTITUDE 4051.00 FEET ASL
11 APR. 83
ASCENSION NO. 106

GEOMETRIC ALTITUDE 4051.00 FEET ASL
11 APR. 83
ASCENSION NO. 106

TABLE 11 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	59.4	-61.3		97.7	567.0	58.1	6.3	1.000022
64500.0	58.0	-61.8		95.6	566.4	65.9	6.4	1.000021
65000.0	56.6	-62.3		93.5	565.7	73.4	6.5	1.000021
65500.0	55.2	-61.8		91.0	566.4	81.0	6.8	1.000020
66000.0	53.9	-59.8		88.0	569.1	91.4	6.9	1.000020
66500.0	52.6	-59.2		85.7	569.8	101.1	7.3	1.000019
67000.0	51.4	-59.2		83.6	569.9	105.6	7.3	1.000019
67500.0	50.1	-59.1		81.6	570.0	101.2	6.0	1.000018
68000.0	48.9	-58.6		79.5	570.6	94.8	4.9	1.000018
68500.0	47.8	-58.1		77.4	571.3	77.9	5.2	1.000017
69000.0	46.7	-57.5		75.4	572.1	63.2	7.2	1.000017
69500.0	45.5	-57.0		73.4	572.8	55.2	9.5	1.000016
70000.0	44.5	-56.5		71.5	573.5	58.1	12.5	1.000016
70500.0	43.4	-55.9		69.6	574.2	62.4	15.0	1.000015
71000.0	42.4	-56.2		68.1	573.8	65.3	19.2	1.000015
71500.0	41.4	-56.5		66.6	573.4	67.4	20.0	1.000015
72000.0	40.4	-56.9		65.1	572.9	69.5	20.1	1.000014
72500.0	39.5	-57.2		63.7	572.5	71.6	20.1	1.000014
73000.0	38.5	-57.5		62.2	572.1	75.8	19.8	1.000014
73500.0	37.6	-57.2		60.7	572.5	81.3	19.3	1.000014
74000.0	36.7	-56.9		59.2	572.9	87.0	19.1	1.000013
74500.0	35.9	-56.6		57.7	573.2	90.5	19.4	1.000013
75000.0	35.0	-56.3		56.3	573.6	92.3	20.0	1.000013
75500.0	34.2	-56.1		54.9	574.0	93.9	20.6	1.000012
76000.0	33.4	-55.8		53.5	574.4	95.3	20.7	1.000012
76500.0	32.6	-55.5		52.2	574.7	96.5	20.2	1.000012
77000.0	31.9	-55.2		50.9	575.1	97.8	19.7	1.000011
77500.0	31.1	-54.9		49.7	575.5	99.3	18.7	1.000011
78000.0	30.4	-54.6		48.4	575.9	101.4	16.9	1.000011
78500.0	29.7	-54.5		47.3	576.0	104.0	15.2	1.000011
79000.0	29.0	-54.6		46.2	575.9	106.5	13.6	1.000010
79500.0	28.3	-54.7		45.1	575.8	105.4	12.8	1.000010
80000.0	27.6	-54.8		44.1	575.6	104.1	12.0	1.000010
80500.0	27.0	-54.9		43.1	575.5	102.7	11.2	1.000010
81000.0	26.4	-55.0		42.1	575.4	99.4	12.9	1.000009
81500.0	25.7	-55.1		41.1	575.3	96.9	14.9	1.000009
82000.0	25.1	-55.2		40.2	575.2	94.9	16.9	1.000009
82500.0	24.6	-55.3		39.3	575.0	95.5	18.3	1.000009
83000.0	24.0	-55.4		38.4	574.9	97.0	19.6	1.000009
83500.0	23.4	-54.9		37.4	575.6	98.3	20.9	1.000008

UPPER AIR DATA
1020050106
JALLEN
TABLE 11 (CONT)

STATION ALTITUDE 4051.00 FEET MSL
11 APR. 80 0845 HRS MST
ASCENSION NO. 106

GEOMETRIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (T)	SPEED KNOTS	INDEX OF REFRACTION.
84000.0	22.9	-54.1		36.4	576.6	101.7	21.4	1.000008
84500.0	22.4	-53.3		35.4	577.7	108.0	21.3	1.000008
85000.0	21.8	-52.5		34.5	578.7	114.4	21.4	1.000008
85500.0	21.3	-51.7		33.6	579.8	119.9	21.6	1.000007
86000.0	20.8	-50.9		32.7	580.8	121.4	21.7	1.000007
86500.0	20.4	-50.1		31.8	581.8	123.0	21.7	1.000007
87000.0	19.9	-49.5		31.0	582.7	124.6	21.7	1.000007
87500.0	19.4	-49.3		30.2	582.9	122.9	20.9	1.000007
88000.0	19.0	-49.1		29.5	583.2	120.6	20.1	1.000007
88500.0	18.6	-48.9		28.8	583.4	118.2	19.3	1.000006
89000.0	18.1	-48.7		28.2	583.6	116.7	18.4	1.000006
89500.0	17.7	-48.5		27.5	583.9	116.0	17.6	1.000006
90000.0	17.3	-48.3		26.9	584.1	115.3	16.7	1.000006
90500.0	16.9	-48.2		26.2	584.4	114.9	16.2	1.000006
91000.0	16.6	-48.0		25.6	584.6	115.7	16.9	1.000006
91500.0	16.2	-47.8		25.0	584.8	116.4	17.6	1.000005
92000.0	15.8	-47.6		24.4	585.1	117.1	18.2	1.000005
92500.0	15.5	-47.4		23.9	585.3			1.000005
93000.0	15.1	-47.2		23.3	585.6			1.000005
93500.0	14.8	-47.0		22.8	585.8			1.000005
94000.0	14.4	-46.9		22.2	586.0			1.000005
94500.0	14.1	-46.7		21.7	586.3			1.000005

STATION ALTITUDE 4051.00 FEET MSL
11 APR. 80
0845 HRS MST
ASCENSION NO. 106

MANDATORY LEVELS
102003100
JALLEN

GEOGETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 12

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4726.	14.4	-4.3	27.	148.0	2.2
800.0	6394.	10.7	-6.5	29.	174.6	0.5
750.0	8147.	7.4	-7.9	33.	234.9	11.0
700.0	9992.	2.0	-10.2	40.	250.4	13.6
650.0	11936.	-3.0	-13.8	43.	261.4	28.4
600.0	13999.	-7.3	-23.2	26.	269.5	40.1
550.0	16209.	-11.2	-28.8	22.	263.4	43.5
500.0	18581.	-17.3	-33.0	24.	264.6	43.6
450.0	21140.	-23.6	-38.2	24.	262.9	41.2
400.0	23926.	-30.6	-44.1	25.	260.1	53.2
350.0	26992.	-37.8	-50.4	25.**	258.3	61.3
300.0	30414.	-46.5			259.3	64.3
250.0	34315.	-54.6			257.5	73.1
200.0	38975.	-54.6			263.0	71.6
175.0	41776.	-54.9			277.8	70.0
150.0	44987.	-56.5			284.5	57.7
125.0	48749.	-59.5			289.5	42.0
100.0	53292.	-63.0			304.3	34.0
80.0	57740.	-68.5			310.4	24.5
70.0	60440.	-62.5			317.6	14.2
60.0	63583.	-61.1			50.8	5.9
50.0	67307.	-59.1			101.0	0.0
40.0	71939.	-57.0			70.3	20.1
30.0	77938.	-54.5			102.5	16.1
25.0	81763.	-55.2			94.6	17.2
20.0	86482.	-49.5			124.1	21.7
15.0	92697.	-47.2				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.